DOCUMENT RESUME

ED 429 940 SP 038 430

AUTHOR Din, Feng S.
TITLE The Benefits of Teaching Small Classes Perceived by Chinese Urban School Teachers.
PUB DATE 1998-02-00
NOTE 16p.; Paper presented at the Annual Meeting of the Eastern Education Research Association (22nd, Hilton Head, SC, February 24-27, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150) -- Tests/Questionnaires (160)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; *Class Size; *Classroom Environment; Classroom Techniques; Elementary Secondary Education; Foreign Countries; Questionnaires; *Small Classes; Teacher Attitudes; Teacher Student Relationship; Teachers; Urban Schools
IDENTIFIERS China

ABSTRACT

A survey with open-ended questions investigated the attitudes of 54 urban Chinese teachers about issues related to the functions and benefits of having small classes (for both teachers and students). Findings indicated that most of the urban Chinese teachers preferred teaching small classes. While they perceived small class size as a beneficial factor in certain respects, they did not believe that students in smaller classes would necessarily have better achievement. They believed that small classes facilitated more individualized help from teachers, more student-teacher interactions, better classroom management, and reduced teacher workload. They also believed in teachers encouraging and creating competition among students, which they regarded as important for students in large classes in order to attain higher achievement. The teachers regarded external influences and the school environment as important factors in learning. They regarded peer help as important to student success. Some cultural differences between U.S. and Chinese teachers were found. An appendix contains the questionnaire (translated into English). (SM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Running head: THE BENEFITS OF TEACHING SMALL CLASSES

ED 429 940

The Benefits of Teaching Small Classes Perceived by Chinese Urban School Teachers

Feng S. Din

William Paterson University

F. Din

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Address: Dr. F. Din
Dept. of Special Education & Counseling
William Paterson University
Wayne, NJ 07470

Phone: 973-720-2680 Fax: 973-720-3467
E-Mail: dinf@nebula.wilpaterson.edu

SP038430

Paper presented at the 22nd Annual Conference of the Eastern Education Research Association, Hilton Head, SC, Feb. 24-27, 1998

BEST COPY AVAILABLE

Abstract

A survey with open-ended questions was conducted on a sample of Chinese urban teachers (N=54). The study investigated issues related to functions and benefits of having small classes for both teachers and students. Findings indicated that the Chinese urban teachers preferred teaching small classes, but perceived small class as a beneficial factor, not directly related to student achievement. They believed that small classes facilitate more individualized help from teachers, more student-teacher interactions, classroom management, and reduce teachers' workload. They also believed in teachers encouraging and creating competition among students, which they regarded as important for students in large classes to achieve better. Some cultural differences were also found.

The Benefits of Teaching Small Classes Perceived by Chinese Urban School Teachers

Small size classes are regarded as a better educational environment by educators, educational administrators, parents and government officials. Parents and educators believe that small class size leads to more effective teaching and improves student achievements (Achilles, 1997; Costello, 1992; Johnston, 1989). Bracey (1995) notes that test scores rise when districts use money to reduce class size and hire experienced teachers. We have learned that most students prefer small classes, however teachers also believe that quality teaching is also possible in large classes (Litke, 1995).

Research literature provides mixed findings on the benefits of small classes. In one study, small classes were found to provide an ideal environment for teacher-student interaction (Nelson & Drake, 1997). British elementary school teachers interacted more with students when they taught in smaller classes (Hargreaves, Galton & Pell, 1997). In the field of special education, smaller classes were found to have provided better environments for learning, especially at the elementary level (McCrea, 1996).

In a study to determine the effect of class size on reading achievement of first grade students, results indicated that students in small classes (N=17) made greater gains than those in large classes (N=27), according to Costello (1992). A study on math learning showed that high school and college students in

small classes performed better in long term retention (Urion & Davidson, 1992). Similarly, Boozer and Rouse (1995) reported that smaller classes at the 8th grade led to larger test score gains from 8th to 10th grade, and that differences in class size could explain approximately 15 percent of the black-white difference in educational achievement.

A large-scale, four-year longitudinal and experimental study on class size (Project Student Teacher Achievement Ratio--STAR) was conducted in Tennessee. In 1985, almost 7,000 kindergarten students were randomly assigned to either small classes (N=15), or regular-sized classes (N=24) with a full-time aide. Results indicated that the small classes had the highest student test outcomes; however, small class intervention did not remedy already defined test-score deficits after students had experienced regular classes (Achilles, 1993). With the same STAR project, small classes beginning in primary grades seemed to prevent later school problems; however, late application of small class treatment appeared to have limited value (Achilles, Nye, Zaharias, Fulton & Cain, 1996). Other related studies reported that small class students from Project STAR scored significantly higher than regular-sized class students on all achievement measures (Folger & Breda, 1989; Nye et al, 1992).

In a follow-up study on fourth graders from Project STAR, significant small class carry-over effects were found on every achievement measure and significant participation differences in small class students (Finn, Fulton, Zaharias & Nye, 1989). With

respect to lasting effect, Achilles, Nye, Zaharias and Fulton (1993) found that students who were in STAR small classes at least in grade 3 were statistically and educationally ahead of other STAR students. After a reanalysis of the STAR test data, Bingham (1994) reported that small class size appeared to make a bigger difference for minority students than for white students in primary school years.

An evaluation study on the Nevada small class program reported mixed effects: Short-term success was reflected in higher reading and math scores. However, special education status, ethnicity, free-lunch eligibility, class configuration, etc. were considered to be more important factors than class size in predicting a student's CTBS score. Although a portion of the differences between student scores were explained by class size and student characteristics, approximately 90% of the differences were unexplained by the data (Nevada State Department of Education, 1995).

The present research literature provides inconclusive findings on the effect/impact of class size. Whether small classes help in making better schools, or in what aspects it helps teachers and students remains to be further investigated. This study was designed to investigate three issues: 1) What kind of factor is class size? 2) What are the benefits for having small classes in schools? 3) What should teachers and students in large classes do in order to teach and learn effectively?

Method

A random survey was conducted in a mid-east China urban school district, with 1,718 schools and 687,563 students. Generally, in this district, according to local educational administrators, a class with 50 or more students was considered "large," a class with 40 or fewer "small." The average class size of the secondary schools was a class with 48-50 students, while classes in the elementary schools were with 45-50 students.

Participants

The participating teachers were full-time teachers in the schools of the urban school district. They had 10 or more years of teaching experience.

Design and Procedure

The first of every five schools was selected from the local school directory. With this method, 10 schools (5 elementary and 5 secondary schools) were selected for the sample. All these schools were ordinary schools, not different from other schools in the urban area, according to a school district official. None of them was a Keynote (highly selective) school.

A survey package (with an anonymous questionnaire and an introduction letter explaining the purpose of the study) was stuffed in an unsealed envelope. A big manila envelope stuffed with 10 such packages was delivered by a project assistant to each of the 10 school principals. In a separate letter, the principals were requested to distribute the survey packages to his/her teachers with 10 or more years of teaching experience. In

total, 100 surveys were sent out this way. In addition, the participating teachers were requested in the introduction letter to return the answered questionnaire in a sealed envelope to their principal. The project assistant went to the principals and collected the data two weeks thereafter.

Instrument

The survey questionnaire was developed based on the research questions. Basically, the questions were open-ended. The questions were designed to collect the perceptions/opinions of Chinese urban school teachers on class-size related issues (see Appendix).

Results

Out of 100 surveys that were sent out, 54 were returned. The return rate was 54%. The following is a summary of the findings.

With respect to Question 1--in terms of what size of class they preferred to teach, 50 of the 54 teachers responded with "Small classes." Two responded, "Mid-sized classes." One said, "Large classes."

The findings listed in Table 1 provides information on only the five factors identified by the highest percentage of teachers in their responses to each question. The number of factors that were actually identified to each question far exceeded five factors. See Table 1.

Discussion

The findings indicate that in terms what size of class is considered "large or small" by the Chinese urban school

Table 1 Chinese Urban Teachers' Responses on Class-Size Related Issues (N=54)

Questions	Factors Identified by Highest % of Teachers*	% Responded
2	Student quality (intelligence, motivation, etc)	81
	Teacher quality (knowledge, dedication, hard-working, teaching quality)	63
	Student effort	59
	Social influence, family influence	48
	School & classroom learning atmosphere	30
3	Big class being a negative factor/small class being a beneficial factor	93
	Non-related factor	2
	Not sure	4
4	Facilitates individualized help to students	89
	Facilitates classroom management	44
	Helps teachers to get to know students better	44
	Less work for teachers	22
	Fewer discipline problems	19
5	Facilitates more student-teacher interactions	52
	Facilitates more teacher-guided practice	41
	Generates fewer disciplinary problems	22
	Easier to be organized	19
	Less bad influence	15
6	Active participation in class	41
	Being highly motivated	41
	Working harder/making more effort	37
	Obeying discipline/rules	22
	Being more competitive	19
7	Create a nice learning environment	44
	Carefully prepare and deliver instructions	30
	Better classroom management	26
	Motivate students	19
	Make instructions interesting	19
8	Mutual help among students	22
	More technology use in education	22
	Good learning atmosphere in school	22
	Organize more activities in class	11
	Students being eager to learn	11

* Factors identified by smaller percentage of teachers not included.

teachers, there seems to be a cultural difference here, on which American educators have a different standard. Nevertheless, it appears that most of the Chinese urban school teachers prefer teaching small classes than large classes. With respect to the relationship between class size and student achievement, the Chinese urban teachers appear to disagree with some American researchers. They do not believe that students in smaller classes will necessarily have better achievement. Of course, their perception of small class (N=40) in the Chinese urban context is so different from ours (N=15 to 17) in the US context. Perhaps they were comparing a class of 40 students with that of 50 or more.

According to the Chinese urban school teachers, the main benefits for teaching smaller classes include: Small classes are easier for teachers to provide individualized help to students, easier to manage; they help teachers to get to know students better, facilitate student-teacher interactions; and they mean less work for teachers, etc. Even though they did not identify any causal relationship between class size and student achievement, these reasons seem to be sufficient for any educator to prefer teaching smaller classes. The reasons seem to be: Small classes benefit the teaching and learning process, and teachers' work-fare, which warrants support from all educators.

The Chinese urban teachers regard the external (outside of school) influences, school and classroom learning atmosphere as important factors, which are closely related to student learning

outcomes. On this issue, they appear to agree with American educators. It seems that they rank these factors as being more important than we do.

The present data also indicate that Chinese urban school teachers believe in competitions among students and also create competitive class activities, which they believe facilitates student learning. Meanwhile they also believe that peer help is also an important factor for students' success in large classes. American educators seem to be shy from promoting competition among students, while encouraging peer help. This cultural difference warrants us to rethink about our beliefs on competition among students: Is it good or bad for students' learning? How can we use competitive activities to help students learn more effectively? Apparently, more research on this issue is needed.

One reason for a 55% return rate is that some Chinese urban school teachers are still afraid to be part of a project that is related to an American educator. As one teacher expressed, "I do not want to be in trouble some day." Approximately 20 years ago, it was commonly considered dangerous by Chinese people to have anything to do with a foreign country. By doing so, one could be readily suspected to be spying for a foreign country at that time.

Conclusion

The findings of the study indicate that the Chinese urban school teachers did not see a necessary link between class size

and student achievement. However, they believed that small classes facilitate more individualized help from teachers, more student-teacher interactions, more teacher-guided practice, classroom management, and reduce teachers' workload. In other words, small classes facilitate the teaching and learning process and reduce teachers' workload. The Chinese urban teachers also believed that competition among students promote learning and large classes facilitate competition among students.

References

Achilles, C. M. (1993). The teacher aide puzzle: Student achievement issues. An exploratory study. (ERIC Document Reproduction Service No. ED 363 956)

Achilles, C. M. (1997). Small classes, big possibilities. School Administrator, 54 (9), 6-9, 12-13, 15.

Achilles, C. M., Nye, B. A., Zaharias, J. B., & Fulton, B. D. (1993). The lasting benefits study (LBS) in grades 4 and 5 (1990-1991): A legacy from Tennessee's four-year (K-3) class-size study (1985-1989). (ERIC Document Reproduction Service No. ED 356 559)

Achilles, C. M., Nye, B. A., Zaharias, J. B., Fulton, B. D., & Cain, V. (1994). The multiple benefits of class-size research: A review of the STAR's Legacy, Subsidiary and Ancillary studies. (ERIC Document Reproduction Service No. ED 390 913)

Achilles, A. M., Nye, B. A., Zaharias, J. B., Fulton, B. D., & Cain, V. (1996). Education's equivalent of medicine's Framingham Heart Study. (ERIC Document Reproduction Service No. ED 402 677)

Bingham, C. S. (1994). Class size as an early intervention strategy in white-minority achievement gap reduction. (ERIC Document Reproduction Service No. ED 368 077)

Boozer, M., & Rouse, C. (1995). Intraschool variation in class size: Patterns and implications. Working Paper #344. (ERIC Document Reproduction Service No. ED 385 935)

Bracey, G. W. (1995). Debunking the myths about money for

schools. Educational Leadership, 53 (3), 65-69.

Costello, P. A. (1992). The effectiveness of class size on reading achievement. (ERIC Document Reproduction Service No. ED 400 035)

Finn, J. D., Fulton, D., Zaharias, J., & Nye, B. A. (1989). Carry-over effects of small classes. Peabody Journal of Education, 67 (1), 75-84.

Folger, J., & Breda, C. (1989). Evidence from Project STAR about class size and student achievement. Peabody Journal of Education, 67 (1), 17-33.

Hargreaves, L., Galton, M., & Pell, A. (1997). The effects of major changes in class size on teacher-pupil interaction in elementary school classes in England: Does research merely conform the obvious? (ERIC Document Reproduction Service No. ED 409 123).

Johnston, J. M. (1989). Teacher perceptions of changes in teaching when they have a small class or an aide. Peabody Journal of Education, 67 (1), 106-22.

Litke, R. A. (1995). Learning lessons from large classes: Students attitudes toward effective and ineffective methods in large classes. (ERIC Document Reproduction Service No. ED 384 088)

McCrea, L. (1996). A review of literature: Special education and class size. (ERIC Document Reproduction Service No. ED 407 387)

Nelson, L. R., & Drake, F. D. (1997). Enhancing reflective

practice through alternative assessment. Journal of Research in Rural Education, 13 (1), 47-56.

Nevada State Department of Education. (1995). The Nevada class size reduction evaluation study, 1995. (ERIC Document Reproduction Service No. ED 400 606)

Nye, B. A., Achilles, C. M., Zaharias, J. B., & Fulton, B. D. (1993). Class-size research from experiment to field study to policy application. (ERIC Document Reproduction Service No. ED 356 558)

Nye, B. A., Zaharias, J. B., Fulton, B. D., Wallenhorst, M. P., Achilles, C. M., & Hooper, R. (1992). The lasting benefits study. A continuing analysis of the effect of small class size in kindergarten through third grade on student achievement test scores in subsequent grade levels: Fifth grade. Technical report. (ERIC Document Reproduction Service No. ED 354 992)

Urion, D. K., & Davidson, N. A. (1992). Student achievement in small-group instruction versus teacher-centered instruction in mathematics. Primus, 2 (3), 257-64.

Appendix

Questionnaire
(Translation of a Chinese Version)

Please briefly answer the following questions. (You may write on the other side of the questionnaire.)

1. If you have a choice, what would you prefer to teach: Small classes or Big classes?

2. In your opinion, what are the main factors that determine students' achievement?

3. Is class size a main factor that is closely related to student achievement, or is it only a beneficial factor?

4. In your opinion, <u>To Teachers</u>, what are the benefits of teaching small classes?

5. In your opinion, <u>To Students</u>, what are the benefits of studying in small classes?

6. What should students in big classes do in order to achieve better?

7. What should teachers do in order to provide a quality education to students in big classes?

8. Please identify other factors that facilitates students' learning quality.

Thank you very much for your time and help!